

## Remarks

This is in response to the Official Action dated May 15, 2007. The Applicant has canceled claims 1 and 15 and rewritten claims 2 and 16 which originally depended from claims 1 and 15 respectively in independent form. We have also rewritten "demux" as - - demux element - - as suggested by the Examiner in what is now claim 16. Claims 27, 29 and 31 have also been amended.

With respect to section 1 of the Official Action regarding the objections to the Drawings, we respectfully submit that the rejection is without merit and should be withdrawn. The Applicant respectfully submits that the Figures are fully labeled with each element in the Figures being identified by a reference number. The Applicant is unsure what the Examiner is objecting to, and why the Examiner states "for example reference numeral 14 in Figure 1 is not labeled". Combiner 14 is clearly labeled as such in Figure 1. The label 14 is located within the box representing the combiner rather than with an arrow pointing to the box but that is permitted. We respectfully submit that the Figures are fully compliant with rule 1.84 of the rules.

If the Examiner is referring to section 37 C.F.R. 1.84(o) relating to legends, we quote the rule "Legends. Suitable descriptive legends may be used subject to approval by the Office, or may be required by the examiner where necessary for understanding of the drawing. They should contain as few words as possible"(emphasis added). We respectfully submit that no such legend is necessary for understanding the drawings. The drawings, when viewed by a person skilled in the art willing to understand with reference to the specification are understandable as currently on file. Accordingly we respectfully submit that the objections to the drawings be withdrawn.

With respect to section 5 of the Official Action rejecting claims 1 to 8, and 15 to 20 under 35 U.S.C. 102(e) is being anticipated by Scott, the Applicant has canceled claims 1 and 15 respectfully. With respect to the rejections to claims 2 and 16 we respectfully submit that the rejections are without merit and should be withdrawn, as Scott fails to teach the subject matter as claimed. In particular we note that the Scott reference does not teach a delay line or a phrase discriminator as claimed. Without limiting the generality of the foregoing, the rejection specifies that the delay line having one or more switches is met by Figure 2, reference

numerals 167 and 161. However, Scott does not teach delay line having one or more switches and the cited reference numerals do not label elements which satisfy the claim limitation. Reference numeral 167 (and 166) in Scott refer to the signals output from the signal splitter 160. Nowhere in the description does Scott indicate that the signal 167 is passed through a delay line. Furthermore, SSB mixer 161 is not a switch, and it does not satisfy the function of adding a delay. The description of the mixer 161 in column 4, lines 48 to 64 clearly describes the mixer as providing a complimentary frequency offset to that introduced by mixer 150. The purpose of these mixers is to differentiate between the diversity antennas and not to add delay. Furthermore, Scott does not teach a phrase discriminator as claimed. In the rejection the Examiner identifies Figure 2 reference numeral 171 as a phrase discriminator. However, it is not. The element labeled 171 is clearly identified as a filter both in the Figure itself and described as such in column 4, lines 66 to column 5, line 2, wherein Scott says that filter 171 removes noise associated with transmission over the cable 152.

Accordingly we respectfully submit that the rejections to claims 2 and 16 fail to demonstrate how Scott teaches each of the claim elements and in any event we respectfully submit that Scott fails to teach the claimed subject matter. Accordingly, we respectfully request withdrawal of the rejections to claims 2 and 16.

As all of the dependent claims depend either directly or indirectly from claims 2 or 16, we respectfully submit that all of claims 2 through 14, and 16 through 26 are therefore allowable on that basis. However, without limiting the generality of the foregoing. We identify the following deficiencies in the rejections to the dependent claims.

With respect to the rejection to claims 6 and 18, column 6, lines 45 to 51, as relied on by the examiner, fails to teach either forward link transmissions or high powered amplifiers. The cited passage describes reverse link transmissions. Scott teaches determining which of two diversity antennas to receive a signal from. The amplifiers in Figure 2 are not described as high power amplifiers and a person skilled in the art would understand that high power amplifiers are not needed for reception. Accordingly, column 6, lines 45 to 51 simply fail to teach the claimed subject matter. Similar comments apply with respect to claims 8 and 20 and once again column 4, lines 33 to 41 fail to teach forward link transmissions or a high power amplifier.

Claim 27 is rejected under 35. U.S.C. 102(b) anticipated by Marshall. We disagree. Marshall has nothing to do with the claimed invention. We respectfully submit that Marshall does not teach a delay line or a phase discriminator as claimed, and the examiner is incorrectly reading sub-channels b and b' as odd and even frequencies. Accordingly we respectfully request withdrawal of the rejection. However, upon further review of the claim, we have voluntarily chosen to amend the claim to more precisely define the claimed invention. As we submit that the claim amendments are not necessary for patentability, no surrender of Doctrine of Equivalents should apply.

Claims 9, 10, 13, 21, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott in view of Wilson. We respectfully submit that the rejection fails to demonstrate a *prima facie* case of obviousness. As we have already demonstrated above, Scott does not disclose a phase discriminator, and we respectfully submit a person skilled in the art would NOT be motivated to substitute the filter as described in Scott with a phrase discriminator. The rejection certainly fails to demonstrate why a person would substitute the filter as taught by Scott with a phrase discriminator including a modified Wilson combiner. The statement that the motivation for implementing a Wilkinson combiner is that it increases the efficiency of the demultiplexer is a mere allegation, which we submit is simply unsupported, and fails to satisfy the PTO's initial burden of demonstrating a *prima facie* case of anticipation with sufficient specificity. Moreover, such a vague indication fails to comply with the U.S. Supreme Court's holding in KSR Int'l. Co. v. Teleflex, Inc., No. 04-1350 (U.S. April 30, 2007) that rejections under 35 U.S.C §103 as should be made explicit, as well as the U.S. Patent and Trademark Office's May 3, 2007 memo (issued by Margaret A. Focarino, Deputy Commissioner for Patent Operations) regarding same.

Claims 11, 12, 14, 23 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott in view of Skones. We respectfully submit that the rejection is deficient for the reasons given above. Furthermore, we point out that Skones teaches a 90 degree hybrid as component of a frequency discriminator and not a phase discriminator as claimed. Accordingly even if Skones can be combined with Scott (which we deny for the reasons given above), the combination fails to teach the claimed subject matter.

The rejection to the remainder of the claims are also either deficient for the same reasons given above, and are also moot in the instance of amended claims 29 and 31. Accordingly we respectfully request withdrawal of all of the rejections and allowance of the application.

No fee is believed due for this submission. However, Applicant authorizes the Commissioner to debit any required fee from Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP. The Commissioner is further authorized to debit any additional amount required, and to credit any overpayment to the above-noted deposit account.

Respectfully submitted,

**DEANE, Peter et al.**

By: /Jeffrey M. Measures/

**Jeffrey M. Measures**

**Reg. No. 40,272**

Borden Ladner Gervais LLP

World Exchange Plaza

100 Queen Street, Suite 1100

Ottawa, ON K1P 1J9

CANADA

Tel: (613) 237-5160

Fax: (613) 787-3558

E-mail: [ipinfo@blgcanada.com](mailto:ipinfo@blgcanada.com)

JMM/dbm